

Figure S1: Ramachandran Plot of Man/Cel5B structure.

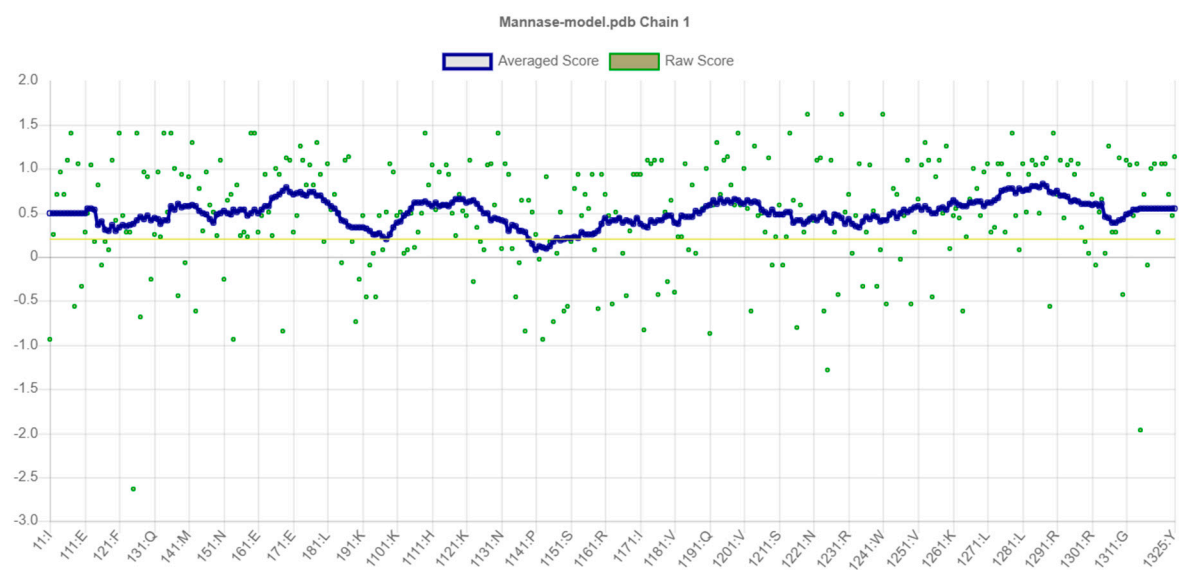


Figure S2: Structural validation using Verify-3D 3D/1D profile.

Mannase structure

Chain A

I P R W R G F N L L E A F S I K S T G N F K E E D F L W M A Q W D F N F V R I P M C H L L W S D R G N P F I I R E D F
 F E K I D R V I F W G E K Y G I H I C I S L H R A P G Y S V N K E V E E K T N L W K D E T A Q E A F I H H W S F I A R
 R Y K G I S S T H L S F N L I N E P P F P D P Q I M S V E D H N S L I K R T I T E I R K I D P E R L I I D G L G Y G
 N I P V D D L T I E N T V Q S C R G Y I P F S V T H Y K A E W V D S K D F P V P E W P N G W H F G E Y W N R E K L L E
 H Y L T W I K L R Q K G I E V F C G E M G A Y N K T P H D V V L K W L E D L L E I F K T L N I G F A L W N F R G P F G
 I L D S E R K D V E Y E E W Y G H K L D R K M L E L L R K Y

PHE 17, HIS 86, VAL 93, ASN 94, LYS 95, GLU 139, PHE 142, GLY 179, TYR 180, ASN 182, ARG 198, TYR 200, ILE
 201, PHE 203, HIS 207, TRP 212, VAL 213, HIS 228, PHE 229, GLU 259, TRP 292, PHE 298

Figure S3: Active site prediction for Man/Cel5B structure using CASTp server.